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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

December 05, 2013

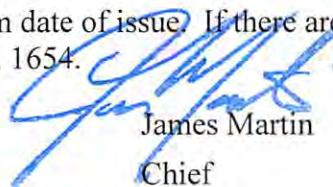
**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-2100522, issued to EQT PRODUCTION COMPANY, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: 607831 (FRASHURE #1)  
Farm Name: JONES LAND & DEVELOPMENT  
**API Well Number: 47-2100522**  
**Permit Type: Plugging**  
Date Issued: 12/05/2013

**Promoting a healthy environment.**

## PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

### CONDITIONS

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1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

ck 16904  
10000  
2100522 P  
Date: November 22, 2013  
Operator's Well \_\_\_\_\_  
Well No. 607831 (Frashure #1)  
API Well No.: 47 021 - 00522

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil \_\_\_\_\_ Gas X Liquid Injection \_\_\_\_\_ Waste Disposal: \_\_\_\_\_  
If Gas, Production X Or Underground storage \_\_\_\_\_ Deep \_\_\_\_\_ Shallow X

5) Elevation: 968' Watershed: Jakes Run  
Location: Glenville 03 County: Gilmer 21 Quadrangle: Gilmer 7.5' 365  
District: \_\_\_\_\_

6) Well Operator EQT Production Company  
120 Professional Place  
Address: Bridgeport, WV 26330

7) Designated Agent: Rex C. Ray  
Address: 120 Professional Place  
Bridgeport, WV 26330

8) Oil & Gas Bryan Harris  
Name: P.O. Box 157  
Address: Volga, WV 26238

9) Plugging Contractor:  
Name: HydroCarbon Well Service  
Address: PO BOX 995  
Buckhannon, WV 26201

10) Work Order: The work order for the manner of plugging this well is as follows:  
**See Attachment for details and procedures.**

RECEIVED  
Office of Oil and Gas

DEC 05 2013

WV Department of Environmental Protection

OFFICE USE ONLY

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector

Bryan Harris

Date 12-4-13



PLUGGING PROGNOSIS -Weston

**Frasure #1 (607831)**

GILMER, COUNY, WEST VIRGINIA  
API # 47-021-00522  
Burnsville Quad

ELEV. 968'

BY: Craig Duckworth  
DATE: 9/12/13

**CURRENT STATUS:**

10" csg @ 154'  
8 1/4" csg @ 776'  
6 5/8" csg @ 1698'  
3" csg @ 1856' (Packer @ 1758')

**TD @ 1856'**

**Fresh Water @ 63'-65'**                      **Salt Water @ None reported**  
**1<sup>st</sup> Salt Sand @ 1202'**                      **Coal @ 63'-65'**  
**Gas shows @ Slate 1812', Big Injun 1783', 3RD Salt Sand 1439', 2<sup>nd</sup> Salt Sand 1298'**  
**Oil Shows @ none reported**  
**Stimulation: Shot @ 1811'-1824' (60qts.)**

1. Notify State Inspector, **Bryan Harris 304-553-6087**, 24 hrs. Prior to commencing operations.
2. Attempt to pull 3" & packer (1856'). If unable to pull 3" cut at top of packer @ 1856' and pull 3"
3. TIH w/ tbg @ 1856'; Set 126' C1A Cement Plug @ 1856' to 1730' ( gas show @ 1812 & Big Injun @ 1783')
4. TOOH w/ tbg @ 1730'; gel hole @ 1730' to 1648'.
5. TOOH w/ tbg, Free Point 6 5/8", cut 6 5/8" @ free point, TOOH w/ 6 5/8" csg
6. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 6 5/8" cut. Do not omit any plugs
7. TIH w/ tbg @ 1648'; Set 100' C1A Cement Plug @ 1648' to 1548'(6 5/8" cag @ 1698')
8. TOOH w/ tbg @ 6 5/8" 1648; gel hole @ 1548' to 1439'
9. TOOH w/ tbg @ 1439'; Set 337' C1A Cement Plug @ 1439' to 1102'(Gas Shows @ 3<sup>rd</sup> Salt Sand 1439' & 2<sup>nd</sup> Salt Sand 1298' 1<sup>st</sup> Salt Sand 1202)
10. TOOH w/ tbg @ 1102'; gel hole @ 1102' to 826'.
11. Free point 8 1/4" @ 776. If unable to pull. Cut at free point
12. TOOH w/ tbg @ 826'; Set 100' C1A Cement Plug @ 826' to 726'( 8 1/4" csg @ 776')
13. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 8 1/4" cut. Do not omit any plugs
14. TIH w/ tbg @ 726' gel hole @ 726' to 200'.
15. TOOH w/ tbg @ 200'; Set 200' C1A Cement Plug @ 200' to Surface
16. Top off as needed
17. Set Monument to WV-DEP Specifications
18. Reclaim Location & Road to WV-DEP Specifications

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NOV 23 2013  
WV Department of Environmental Protection

GEL IS FRESH WATER WITH AT LEAST 6% BENTONITE.

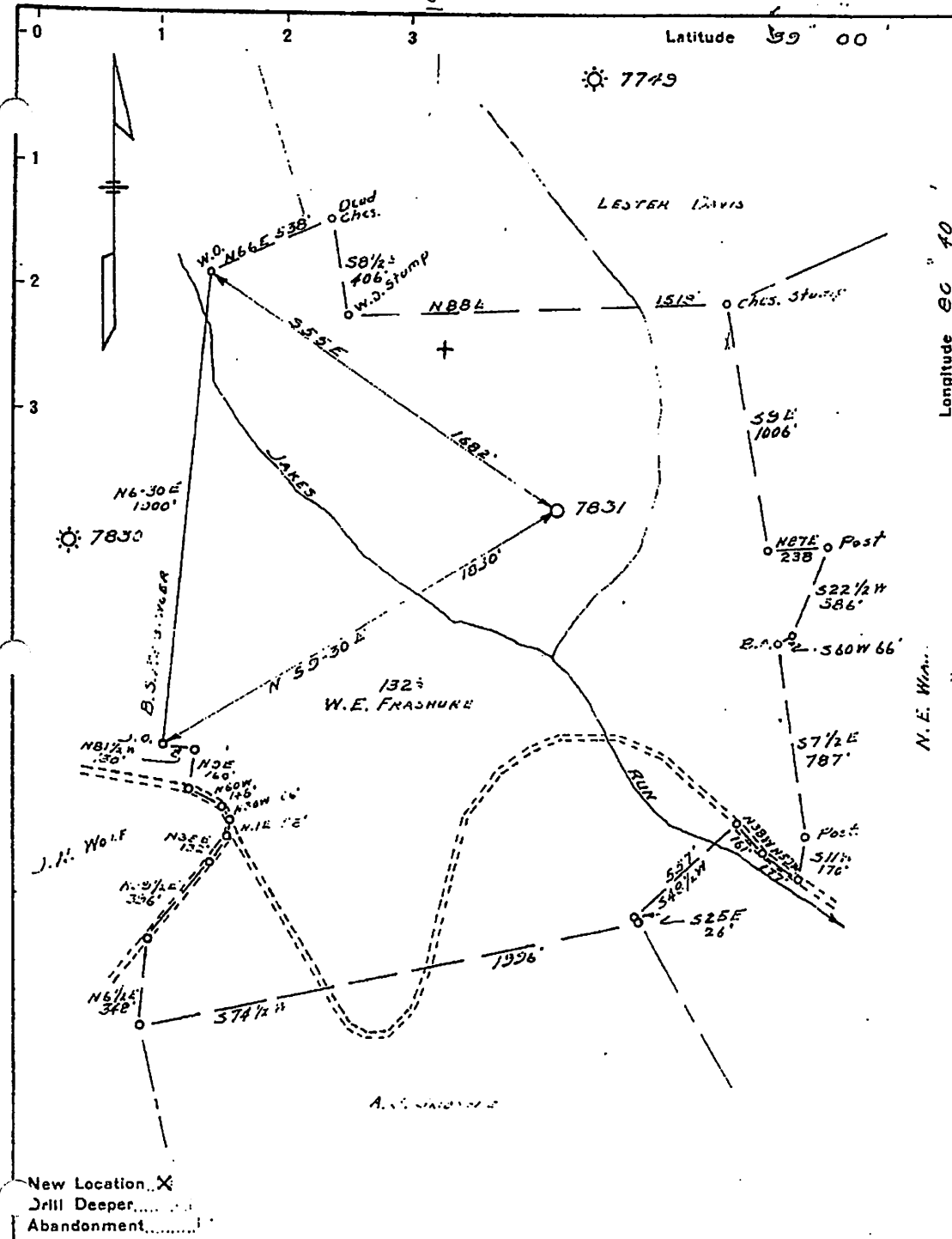
WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

Permit No. Gil-522  
Burnsville Quad.  
Company  
Address  
Farm  
Location  
Well No.  
District  
Surface  
Commenced  
Completed  
Shot  
Flow  
Volume  
Rock Pressure

Pittsburgh & W. Va. Gas Co.,  
Clarksburg, West Virginia  
Wm. Earl Frasure et ux Acres 132  
Burns. N/W. 1-3  
7831 Elev. 977.5 VA  
Glenville Gilmer County  
Wm. Earl Frasure et ux, Linn, W. Va.  
Oct. 15, 1941  
Nov. 13, 1941  
11-17-41 Depth 1811-1824 (60 qts)  
44/10ths Merc. in 1 1/2"  
500,000 Cu. Ft.  
615 lbs. 24 hrs.

Gas Well  
Casing & Tubing  
10 154' 154'  
8 1/2 776 776  
6-5/8 1632 1698  
3 1856 1856  
Packer - Hook  
Size 6-5/8" X 3"  
Depth set 1758  
Perf. top 1816  
Perf. bot. 1836  
Coal 53' 24"

Clay	rd	s	0	10	Blue Monday	wh	h	1645	1653
Gravel	gy	s	10	25	Slate	wh	s	1653	1680
Mud	bl	s	25	60	Big Lime	wh	h	1669	1743
Slate	bk	s	60	63	Big Injun	wh	h	1743	1845
Coal	bk	s	63	65W.HF 63'	Gas			1788 - 83	19/107.1"
Slate	wh	s	65	112	Slate	dk	s	1845	1855
Sand	wh	h	112	144	Gas			1812-22	20/107.11"0.
Slate	wh	s	144	169	Total Depth			1856	
Red Rock	rd	s	169	268	S. L.			1856	
Slate	bk	s	268	278					
Red Rock	rd	s	278	319					
Slate	bk	s	319	348					
Red Rock	rd	s	348	354					
Slate	wh	s	354	374					
Little Dunkard	h		374	410					
Slate	wh	s	410	536					
Slate	bk	s	536	572					
Big Dunkard	wh	l	572	589					
Slate	wh	s	589	630					
Lime	wh	brk.	630	688					
Slate	wh	s	688	711					
Gas Sand	wh	h	711	7 1					
Slate	wh	s	771	800					
Sand	wh	h	800	831S.L.820'					
Slate	wh	s	831	849					
Hm. Sand	wh	l	849	920					
Slate	bk	s	920	930					
Hm. Sand	wh	l	930	970					
Slate	bk	s	970	1045					
Lime	wh	h	1045	1062					
Slate	bk	s	1062	1202					
1st. Salt Sand	wh	l	1202	1227					
Slate	bk	s	1227	1251					
Lime	wh	h	1251	1264					
2nd. Salt Sand	wh	h	1264	1321G.1298 S.L.1299					10/10 W. 1/2" Onnc.
Slate	bk	s	1321	1324					
Lime	dk	h	1324	1342					
Slate	bk	s	1342	1359					
Lime	dk	h	1359	1402					
Slate	bk	s	1402	1419	S.L.1445				
3rd. Salt Sand	wh	h	1419	1450G.1439-1441					10/10 W 1"
Slate	dk	s	1450	1456					
Sand	wh	h	1456	1514					
Slate	dk	s	1514	1520					
Sand	wh	h	1520	1555					
Slate & Shells	wh	s	1555	1570					
Red Rock	rd	s	1570	1594					
Maxon Sand	wh	h	1594	1604					
Red Rock	rd	s	1604	1609					
Slate	wh	s	1609	1621					
Lime	wh	h	1621	1637					
Lime	wh	brk.	1637	1645					



Company PITTSBURGH & W. VA. GAS CO.  
 Address CLARKSBURG, W. VA.  
 Farm W. EARL FRASHURE  
 Tract \_\_\_\_\_ Acres 132 Lease No. 22893  
 Well (Farm) No. 1 Serial No. 7831  
 Elevation (Spirit Level) 277.5 V.A.  
 Quadrangle BURNSVILLE N.W. 13  
 County GILMER District GLENVILLE  
 Engineer Paul W. Cunningham  
 Engineer's Registration No. \_\_\_\_\_  
 File No. X-97-P-99 Drawing No. \_\_\_\_\_  
 Date 8-26-41 Scale 1" = 500'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

**WELL LOCATION MAP**  
 FILE NO. GIL-522

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

157173

WEST VIRGINIA DEPARTMENT OF MINES AND GEOLOGY



WW-4-A  
Revised 6/07

1) Date: November 22, 2013  
2) Operator's Well Number  
607831 (Frashure #1)  
3) API Well No.: 47 021 - 00522  
State County Permit

**STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT**  
**DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS**  
**NOTICE AND APPLICATION TO PLUG AND ABANDON WELL**

4) Surface Owner(s) to be served:  
(a) Name Jones Land and Development LLC ✓  
Address P.O. Box 1  
Sand Fork, WV 26430  
  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
  
6) Inspector Bryan Harris ✓  
Address P.O. Box 157  
Volga, WV 26238  
Telephone 304-553-6087

5) (a) Coal Operator:  
Name None  
Address \_\_\_\_\_  
  
(b) Coal Owner(s) with Declaration ✓  
Name Jones Land and Development LLC  
P.O. Box 1  
Address Sand Fork, WV 26430  
  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
  
(c) Coal Lessee with Declaration  
Name None  
Address \_\_\_\_\_

**TO THE PERSONS NAMED ABOVE:** You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Division of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator: EQT Production Company  
By: Victoria J. Roark ✓  
Its: Permitting Supervisor  
Address: PO Box 280  
Bridgeport, WV 26330  
Telephone: (304) 848-0076

Subscribed and sworn before me this 22 day of November, 2013  
Kathy M. Kugel Notary Public  
My Commission Expires: 8-24-2022

The Office of Oil & Gas processes your personal information, such as name, address and phone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [depprivacy@wv.gov](mailto:depprivacy@wv.gov)





STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS  
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM  
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name: EQT PRODUCTION COMPANY OP ID: \_\_\_\_\_  
Watershed: Jakes Run Quadrangle: Gilmer 7.5'  
Elevation: 968' County: Gilmer District: Glenville

Description of anticipated Pit Waste: Formation Fluids

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes\_\_\_ No X  
Will synthetic liner be used in the pit? Yes Is so, what ml.? 30 ml

Proposed Disposal Method for Treated Pit Wastes:  
X Land Application  
\_\_\_\_ Underground Injection - UIC Permit Number \_\_\_\_\_  
\_\_\_\_ Reuse (at API Number) \_\_\_\_\_  
\_\_\_\_ Offsite Disposal Permit #. \_\_\_\_\_  
\_\_\_\_ Other: Explain \_\_\_\_\_

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. \_\_\_\_\_  
If oil based, what type? Synthetic, petroleum, etc. \_\_\_\_\_

Additives to be used? \_\_\_\_\_

Will closed loop system be used? \_\_\_\_\_

Drill Cuttings disposal method? Leave in pit, landfill, remove offsite, etc. \_\_\_\_\_  
If left in pit and plan to solidify what medium will be used? Cement, Lime, sawdust \_\_\_\_\_  
Landfill or offsite name/permit number? \_\_\_\_\_

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any terms or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Victoria Roark*

Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV

Subscribed and sworn before me this 22 day of November, 2013

*Kathy M. Kugel*  
My Commission Expires 08-24-2022





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Office of Oil and Gas

OPERATOR'S WELL NO.:  
607831 (Frashure #1)

LEGEND

DEC 05 2013

WV Department of Environmental Protection

Property Boundary

Road

Planned Fence

Existing Fence

Open Ditch

North

Pit with Cut Walls

Spring

Drain Pipe with size in inches

Stream

Artificial Filter Strip

Building

Water well

Pit with Compacted Walls

Diversion

Wet Spot

Water Way

Cross Drain

Rock

Drill site

Area of Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH 5.8

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20) or equivalent 1/3 ton lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre or hydroseed.

SEED MIXTURES

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

ATTACH:

Drawing(s) of road, location, pit and proposed area for land application.  
Photocopies section of involved 7.5' topographic sheet.

Plan approved by: Bryan Ham

Comments: \_\_\_\_\_

Title: Oil & Gas Inspector Date: 12-4-13  
Field Reviewed?  Yes  No



Topo Quad: Gilmer 7.5'

Scale: 1" = 2000'

County: Gilmer

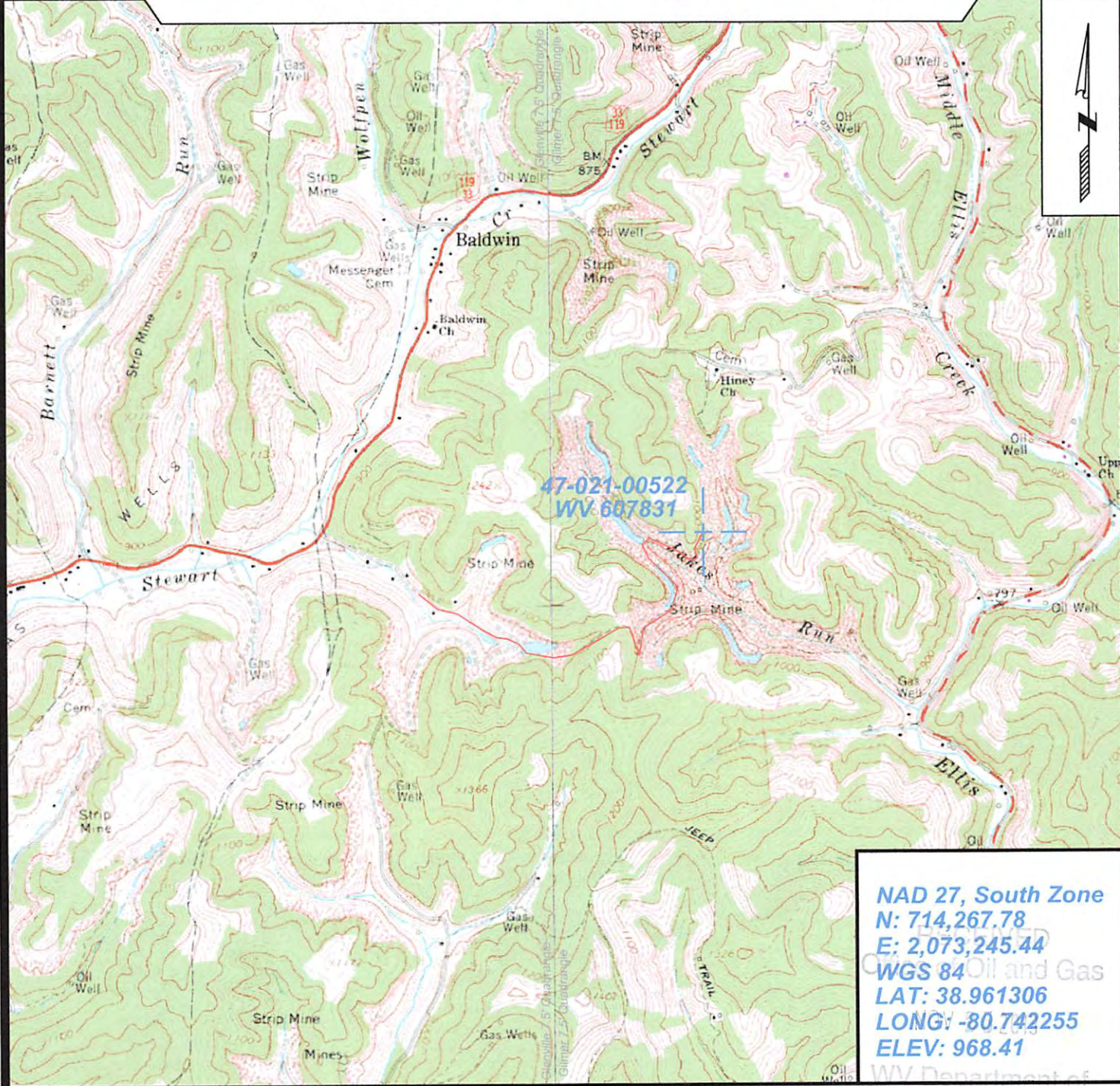
Date: October 17, 2013

District: Glenville

Project No: 25-19-00-07

### 47-021-00522 WV 607831 (Frashure #1)

Topo



NAD 27, South Zone  
 N: 714,267.78  
 E: 2,073,245.44  
 WGS 84 Oil and Gas  
 LAT: 38.961306  
 LONG: -80.742255  
 ELEV: 968.41



SURVEYING AND MAPPING SERVICES PERFORMED BY:  
**ALLEGHENY SURVEYS, INC.**  
 1-800-482-8606  
 P.O. BOX 438  
 BIRCH RIVER, WV 26610  
 PH: (304) 649-8606  
 FAX: (304) 649-8608

PREPARED FOR:  
 Environmental Protection  
**EQT Production Company**  
 P.O. Box 280  
 Bridgeport, WV 26330



WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas  
**WELL LOCATION FORM: GPS**

API: 47-021-00522 . WELL NO.: WV 607831 (Frashure #1) .

FARM NAME: Frashure .

RESPONSIBLE PARTY NAME: EQT Production Company .

COUNTY: Gilmer . DISTRICT: Glenville .

QUADRANGLE: Gilmer 7.5' .

SURFACE OWNER: Jones Land & Development, LLC .

ROYALTY OWNER: EQT Production Company, et al. .

UTM GPS NORTHING: 4312514 .

UTM GPS EASTING: 522331 . GPS ELEVATION: 295 m ( 968 ft ) .

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS     : Post Processed Differential       
Real-Time Differential     

Mapping Grade GPS X: Post Processed Differential X  
Real-Time Differential     

4. **Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

Signature

Date

Title

  
11/4/13

PS # 2180





## POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY

LEASE NAME AND WELL No. Frashure #1 WV 607831 (47-021-00522)

### POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 607831.

RECEIVED  
Office of Oil and Gas

NOV 25 2013

**BIRCH RIVER OFFICE**  
P.O. Box 438 • 237 Birch River Road  
Birch River, WV 26610  
phone: 304-649-8606  
fax: 304-649-8608

**BRIDGEPORT OFFICE**  
172 Thompson Drive  
Bridgeport, WV 26330  
phone: 304-848-5035  
fax: 304-848-5037

**CALDWELL OFFICE**  
212 Cumberland Street  
Caldwell, OH 43724  
phone: 740-305-5007  
fax: 740-305-5126

**ALUM CREEK OFFICE**  
P.O. Box 108 • 1413 Childress Road  
Alum Creek, WV 25003  
phone: 304-756-2949  
fax: 304-756-2948



Topo Quad: Gilmer 7.5'

Scale: 1" = 2000'

County: Gilmer

Date: October 17, 2013

District: Glenville

Project No: 25-19-00-07

Water

### 47-021-00522 WV 607831 (Frashure #1)

No potential water wells within 1000'

47-021-00522  
WV 607831

NAD 27, South Zone  
N: 714,267.78  
E: 2,073,245.44  
WGS 84  
LAT: 38.961306  
LONG: -80.742255  
ELEV: 968.41 Gas

PREPARED FOR:

WV DNR 25 2013 of  
**EQT Production Company**  
P.O. Box 280  
Bridgeport, WV 26330

SURVEYING AND MAPPING SERVICES PERFORMED BY:

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